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UNIVERSITY OF CALIFORNIA

Water Rationing

Program

San Francisco

Water Department

June 1988

Important Telephone Numbers

Water Conservation Hotline
(24 hour recording) 923-2666

Water Rationing: Information/
Questions 923-2662

High water bill questions 923-2460

Leak in the street (24 hours) 550-4911

Leak in the sidewalk 923-2400

Recreation and Parks Department
(City Parks Irrigation) 558-4431

Department of Public Works
(City buildings and irrigation of
traffic median strips) 695-2012



90 01251
Dear San Franciscans:

I've asked the Water Department to include this message about our water supply.

Water is our most precious natural resource. In 1987 and now again in 1988, nature has not provided us with enough water for all our needs.

We are in a water shortage emergency. Because we can't count on next winter giving us a full rainy season, we've adopted a water rationing plan to safeguard our water supplies.

If you don't water outside your house, you only have to cut back by 10% under the rationing plan. If you water outdoors, that use must be cut back by 60%. Watering must be done carefully but there will still be enough water for your landscaping to survive. Altogether, San Franciscans must reduce water consumption by 14%.

The plan is as fair as possible to all customers. It will protect jobs and businesses and minimize hardship on residential customers. If you feel your allotment is a hardship for you—beyond what is expected of all of us during the drought—then your request for an exemption will be carefully considered.

We're going to live with this ration at my house and within City government. It requires all of us to plan and think wisely about the water we use. Taking these steps now can save us from severe measures next year.

Thank you for helping all of us meet this emergency together.

Art Agnos

Mayor of San Francisco

Every Drop Counts



he Challenge June 1988: We are in the middle of the second of two of the driest years on record.

Total water storage is now at 55% of capacity and projected runoff from snowpack in the mountains is less than one-third of normal. At current consumption rates, the anticipated water supply is inadequate to provide for the domestic needs of the 2.1 million people served by the Hetch Hetchy water supply system.

The possibility of a third dry year in 1989 spells danger. Lack of accuracy in long range weather forecasting requires that water be conserved now in case of another dry year.

The Goal Reduce overall water use in San Francisco and the suburban areas 25%, by reducing inside usage by 10% and outside usage by 60%. This results in minimum impact on business, employment, and quality of life.

The Solution On April 28, 1988, the San Francisco Public Utilities Commission declared a water shortage emergency and adopted a conservation program which includes strict water rationing.

The allocation plan is equitable for business and residential customers, including those consumers who have been conserving water all along. The plan insures that there will be a sufficient supply of water available for domestic use, sanitation, and safety.

Allocation Plan



All water customers within the City and County of San Francisco and customers outside the City and County served directly by the San Francisco Water Department are governed by this allocation plan. The plan also includes the 30 suburban communities located in San Mateo, Santa Clara and Alameda Counties which purchase water for resale. Actual 1987 water consumption information is used to calculate allotments.

Note: There is no metering in place to measure inside and outside use. Meters measure total use. The following methods are used to estimate inside and outside use. We want the rationing to be fair and therefore outside use gets a higher reduction than inside use.

Inside Use Inside use takes into account water for basic needs: cooking, cleaning, and washing. For bi-monthly accounts the allocation for each billing period for inside use will be 90% of the average consumption for billing periods ending in January, February, March and December 1987. For monthly accounts the allocation for each billing period will be 90% of the average consumption for the four billing periods ending in the above months.

Outside Use The allocation for outside use for the billing periods April through November will be 40% of the difference between the average consumption calculated above for inside use and actual consumption for the same billing period in 1987.

Total Allocation The allocations for each billing period are the total of the allocations for inside and outside use.

Maximum Allocation for Single Family Residences No single family residence will receive an allocation of more than 4,000 cubic feet bimonthly (or 498 gallons per day).

Allocations Where No Past History Exists When water records for calendar year 1987 are not available, do not cover various portions of the year, or do not allow for establishment of equitable allocations, earlier records or those of customers with similar water uses may be used in order to set or adjust individual allocations.



More than 97% of the earth's water is salt water while less than 3% is available fresh water.



Water waste is prohibited, including but not limited to flooding or runoff in gutters or streets.

2. Hoses shall not be used to clean sidewalks, driveways, patios, parking lots or other hard-surfaced areas.

3. Hoses used for washing cars, boats, trailers, or other vehicles must have positive shut-off valves.

4. Restaurants will serve water only on request.

5. Water used for cooling must be recycled to the extent possible.

6. No water will be used to clean, fill, or maintain levels in decorative fountains.

7. No additional water will be allowed for new landscaping or expansion of existing facilities unless low water use landscaping designs and irrigation systems are employed.

8. A water service connection for new construction will be granted only if water saving devices are incorporated in interior plumbing fixtures and landscaping is kept to a minimum and installed as in Rule 7 above.

9. Construction water for consolidation of backfill, dust control or other non-essential uses will be denied if other methods or water sources can be used.

10. Irrigation of lawns, playfields, parks, median strips, golf courses, cemeteries, and landscaping of any type with potable water will be reduced by at least 60% of the equivalent 1987 calendar period.



Bay Area residents flush the toilet an average of 4 times per person per day.

Conventional toilets use 5-7 gallons of water per flush.

75% of indoor water use is in the bathroom.

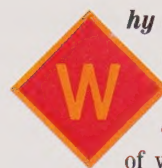
Exception Procedures

Procedures for requesting larger water allotments or exceptions to the regulations and restrictions on water use are listed below. Exceptions will be made for the protection of public health or safety or undue hardship to the applicant including adverse economic impacts such as loss of production or jobs. Any exceptions are subject to the following requirements and procedures:

1. It must be shown that there are no alternatives to potable water.
2. Applications must be in writing to the Rationing Program Administrator.
3. Water used under the exception procedure must be used without waste.
4. Approval of exceptions for non-residential customers will require verification of use of all appropriate conservation measures.
5. Denials of application may be appealed to the General Manager of the San Francisco Water Department whose decision will be final.

A complete copy of the water rationing rules and regulations is available by writing to Rationing Program Administrator, San Francisco Water Department, P.O. Box 7466, San Francisco, CA 94120.

Answers to Your Questions




Why are we rationing water when other Bay Area communities and Southern California are not? There are hundreds

of water systems throughout California. Each can have different sources such as groundwater, rivers, streams, or lakes. San Francisco's water supply originates 160 miles from the Bay Area in the Sierra Nevada mountains. Drought conditions in the Central Sierra for two successive years have greatly reduced overall storage. Other water systems may receive their supply from sources that have not been as severely affected by the drought as the Hetch Hetchy supply.

How long will water rationing last? It depends on the weather. If heavy rainfall and mountain snow return this coming winter, rationing will end early in 1989. However, if drought conditions continue, rationing must remain in effect next year.

How do I apply for more water for my home or business? All appeals for increases in water allocations must be made using the Water Department appeal form. This form was included with your water allocation information. It is available at 425 Mason Street or by calling 923-2662 during business hours. Customers are required to provide specific information to support any request for an increased allocation. All appeals will be reviewed and a written response given on a timely basis.



Water yards and gardens in the early morning (before 10 am) to reduce water lost to evaporation.



1 cubic foot = 7.48
gallons of water.

1 acre foot =
325,829 gallons
(or enough to cover
one acre of land
one foot deep).

1 gallon of water
weighs 8.34 pounds.

How can I cut back my usage by 25% when I have been conserving water since the 1977 drought? The current rationing program calls for a systemwide reduction of 25% including our suburban wholesale customers. San Francisco customers are only required to reduce consumption by 14% overall. Since the greatest reduction is in outside water usage, if you use little or no water for outdoor irrigation, your reduction will be closer to 10%. In this way the efforts of those customers who have practiced conservation over the years have been recognized.

Will City and other government agencies be required to comply with the rationing plan? Yes. All customers served by the San Francisco Water Department are required to comply with rationing. The formula used to calculate your individual allocation is the same one used for City departments and suburban resale customers.

Can I wash my car and water the garden? Yes to both. Remember that you have a fixed allocation of water each billing period, so use it wisely. Hoses used to wash cars must have a positive shutoff valve on the end. When watering the garden, be careful not to allow water to runoff onto sidewalks and streets in a wasteful manner.

What is "gutter flooding"? "Gutter flooding"—prohibited in the rationing plan—is a wasteful practice whereby water is allowed to runoff onto sidewalks, streets, and gutters. Overwatering a front yard often leads to "gutter flooding."

How will water rationing be enforced? The San Francisco Water Department will enforce water rationing rules and regulations. Customers who exceed their water allocations will be subject to costly financial penalties. Customers who continue to exceed their allocation or violate water use restrictions after receiving a written warning notice will have either a flow restriction device installed or have their water service disconnected.

How can I monitor my own water consumption? A simple and easy way to monitor water consumption in your home or business is by reading the water meter. By learning to read the water meter you can check your individual water usage and avoid water loss due to leaks. Most meters in San Francisco are located in a concrete box near the front curb. To check for leaks, observe the water meter for at least 15 minutes with all water turned off. If there is any movement on the meter, there is a leak. When you water the garden or wash clothes, you can measure how much water is used by reading the meter before and after. All meters register in cubic feet. One cubic foot equals 7.48 gallons.



Water Wise Conservation Tips



In this time of drought, there are many things that can be done to save water and stay within your allotment.

Let's all work together to become water wise. To be water wise is to realize that water is a precious and limited resource that should never be wasted. Let daily water use reflect this water wise attitude.

Outside Use

- Consult your local nursery on ways to maintain a garden during a drought.
- Weed your garden! Weeds compete with plants for available water.
- Water before 10 am or after 8 pm to avoid loss due to evaporation.
- Use mulches around plants to help retain moisture in the soil between waterings.
- Water slowly, deeply, and twice weekly. Overwatering leads to runoff onto streets and sidewalks.
- Select low-water-use plants for your garden. They require little if any water to maintain.
- Lawns are the biggest water user in the garden. Reduce the amount and frequency of lawn watering to help stay within your allotment.

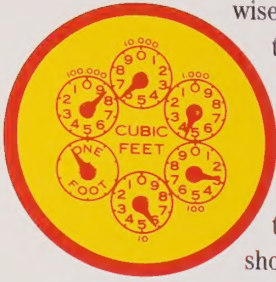
Average consumers overwater their lawns and gardens by as much as 50%.

The California poppy is an example of a low water use plant.

Example 1 is a round reading register. Begin with the largest dial labeled (100,000 or 1,000,000) and read clockwise (to 10,000, 1000, etc.). Since the Water Department bills in units of 100 cubic feet, we disregard the last two dials when billing. To monitor individual usage read all of the dials. If the hand on any dial is on or just short of the next number, and the next smaller dial is less than zero, use the lower number. One complete revolution on the last dial, marked "one foot," is one cubic foot.

Example 2 is the odometer type register. It reads just like the odometer in a car, from left to right, but in cubic feet. Read all of the numbers on the register when checking individual water usage. The large sweep hand is just like the second hand on a watch. One complete revolution is one cubic foot. This sweep hand is also useful in leak detection. The same principle applies when billing in 100 cubic feet: drop the two lowest numbers on the right.

As always, call the Water Department if you need further assistance locating or reading your meter.



*Example 1:
Reading 864.25*



*Example 2:
Reading 0456.85*



A leaky faucet (30 drips per minute) can waste in excess of 50 gallons a day.

90% of leaks in the home occur in toilets.

Inside Use

- Be a leak seeker. Repair leaks as soon as possible. Toilets are the most common place to find leaks.
- Install water saving devices in toilets, showers, and faucets.
- Take short showers. Don't fill your bathtub to the top.
- Operate automatic clotheswashers and dishwashers with full loads only.
- Avoid using the garbage disposal. It requires water to operate!
- Never let the water run while brushing teeth or shaving.
- Keep cold drinking water in a covered container in the refrigerator.
- Wash fruit and vegetables in a container in the sink rather than under running water.



Water Saver's Guide

	<i>Normal Use</i>	<i>Conservation Use</i>
Shower	Running Water 6-10 gpm	Five minute limit
Brushing Teeth	Tap open 5 gallons	Wet brush, rinse, 1/2 gallon
Tub Bath	Full 36 gallons	Minimum level, 10-12 gallons
Shaving	Tap open 20 gallons	Fill basin, 1 gallon
Dishwashing	Tap open 30 gallons	Use dish-pan, rinse 5 gallons
Automatic Dishwasher	Full cycle 25 gallons	Short cycle 12 gallons
Washing Hands	Tap open 3 gallons	Fill basin 1 gallon
Toilet Flushing	5-7 gallons	With displacement device, 4-6 gallons
Washing Machine	Full cycle 35-50 gallons	Short cycle 15-20 gallons
Outdoor Watering	With hose 6-10 gpm	Reduce 60%, water in early a.m.

San Francisco Water Department
425 Mason Street
San Francisco, California 94102

